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Robust and secure image steganography based on elliptic curve cryptography (Conference Paper)

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Abstract

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With the ease of editing and perfect reproduction in digital multimedia, the protection of ownership and the prevention of unauthorized tampering of multimedia data (audio, image, video, and document) become important concerns. Steganography is one of these schemes that entails the opportunity of hide any secret information into images. Recently there are many techniques used for robust and secure image steganography, that can trade off between the capacity, payload, security, minimizing distortions of the image and high robustness. All these are challenges that need to implement a suitable technique that verify the most of these challenges. However developing a robust and secure image steganographic technique against detect ability need to combined cryptography and steganography. In this paper the issue of secure and robust image data hiding is proposed through using (LSB) technique and Elliptic curve cryptography (ECC). The proposed scheme allow the sender to select a suitable cover and secret message that decidable to transmit through unsecure channel and then encrypt the message using (ECC) and embed it by (LSB) into selected cover. © 2014 IEEE.

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Elliptic Curve Cryptography (ECC) Least Significant Bit (LSB)

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